Steps in Respiration

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Glycolysis

* glucose is split into two molecules of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ process
* occurs in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Produces 4 molecules of ATP, but uses \_\_\_\_\_\_\_\_\_\_
* net gain = \_\_\_\_\_ ATP (the energy investment)
* Products: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C-A-C

* Products: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ETC (Electron Transport Chain)

* Products: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Overall: 1 molecule of glucose produces about \_\_\_\_\_\_ molecules of ATP

Why can this vary? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cells Recycle ATP

* How much will your body use in 1 day? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Diagram of recycled ATP:

Aerobic vs Anaerobic Respiration

* after glycolysis:
* if oxygen is present, 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ respiration
* no oxygen  anaerobic respiration (fermentation)
  + - 2 types of fermentation
      * Alcoholic and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Aerobic vs Anaerobic Respiration

Copy down chart here:

List Advantages & Disadvantages

to both types of respiration.